

Investigator's Report

Detective

Case Information

Investigator's Name: _____ Date: _____

Case File #: 005 _____

Case Name: Ancient Climate _____

Location: Florissant Fossil Beds National Monument, CO _____

Observations:

In the last mystery, you learned how to use the floristic and physiognomic methods to compare fossils to living organisms. You already know that fossils can tell us what types of plants and animals lived in Florissant during the Eocene. Go to the fossil collections and look at the plant and animal fossils from Florissant. Write some observations about the fossils. Do you think that you can learn something about the ancient climate based on the types of plants and animals that lived here during the Eocene?

Questions and Hypotheses

Formulating hypotheses is an important step in your investigation. How can you determine what a past environment was like based on fossils? Write your hypothesis about the Eocene environment in the space provided in the investigator's report. Remember that a hypothesis is a statement that answers a question. Your hypothesis should also be something that you can test with the evidence you will collect.

1. What kinds of plants and animals lived in the Florissant Valley during the Eocene?

2. What environmental conditions would these plants and animals need to survive?

3. What can you say about the Eocene climate based on the types of plants and animals found in the fossils from that time?

Now that you have hypotheses written, start looking at the evidence to see if it supports your hypotheses. You will need to visit these leads to gather evidence for your case. Use the space below to take notes.

Introduction Movie:

Fossil Collections:

Floristic Method:

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Physiognomic Method:

Tour the Eocene Epoch:

Geologic Time Scale - The Eocene Epoch:

Results and Conclusions

Verification

Investigator's Signature: _____ Detective

Detective